XR-T200

SERVICE MANUAL

Saudi Arabia Model

Model Name Using Similar Mechanism	XR-1750
Tape Transport Mechanism Type	MG-52A-135

- XR-T200 are almost same as XR-1750.
  Printed wiring boards, schematic diagram, exploded views and electrical parts list are described in this service manual.
  Please refer to XR-1750 service manual previously issued for the other informations.

TABLE OF CONTENTS

1. EXPLODED VIEWS 2

2. DIAGRAMS

2-1. IC Pin Function Description 6
2-2. Printed Wiring Boards –MAIN Section– 8
2-3. Schematic Diagram –MAIN Section– 11
2-4. Printed Wiring Board –CONTROL Section– 15
2-5. Schematic Diagram –CONTROL Section– 17

3. ELECTRICAL PARTS LIST 19

SERVICING NOTES

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

FM/AM CASSETTE CAR STEREO

MICROFILM

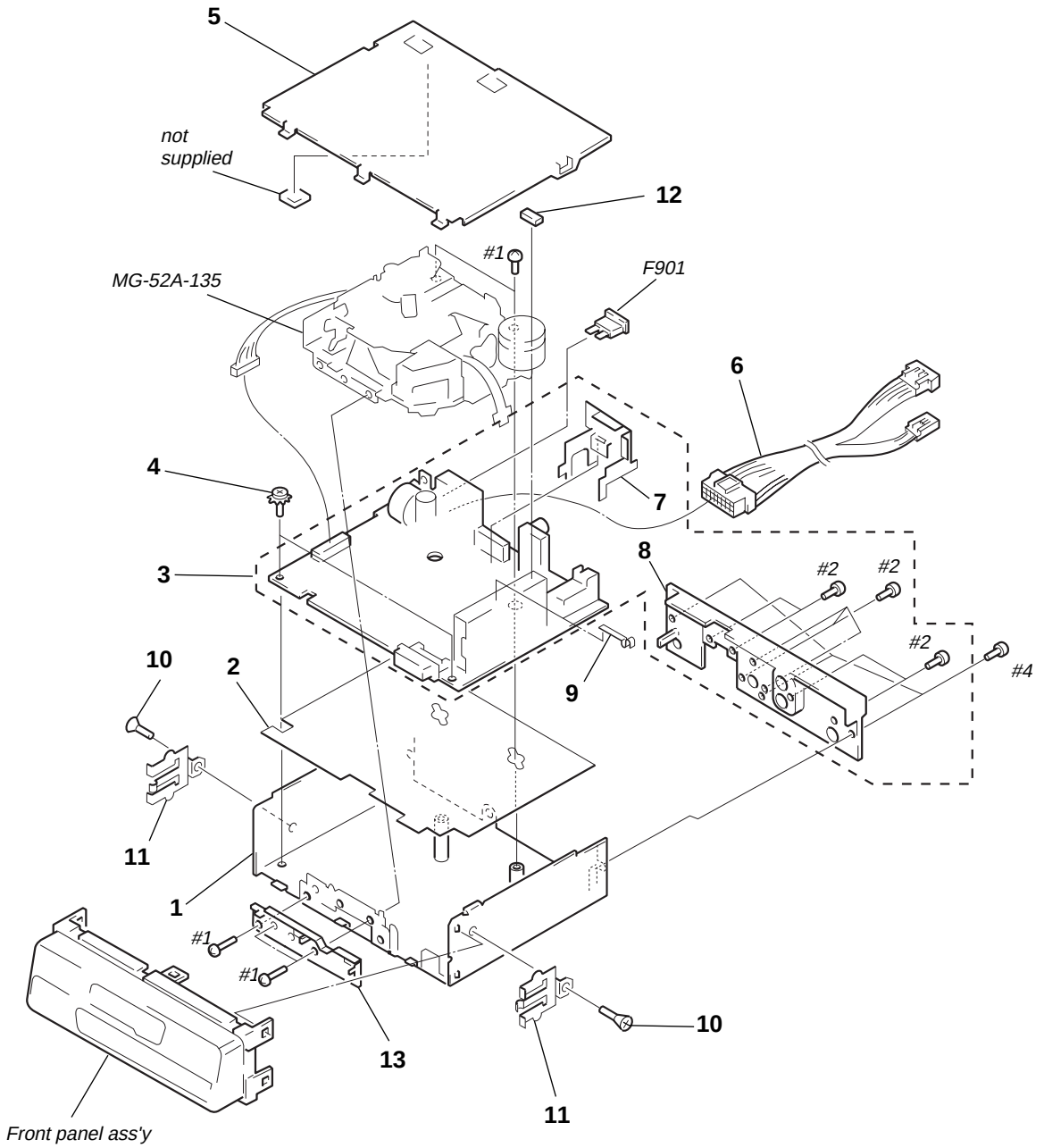
SONY®

SECTION 1
EXPLODED VIEWS

NOTE:

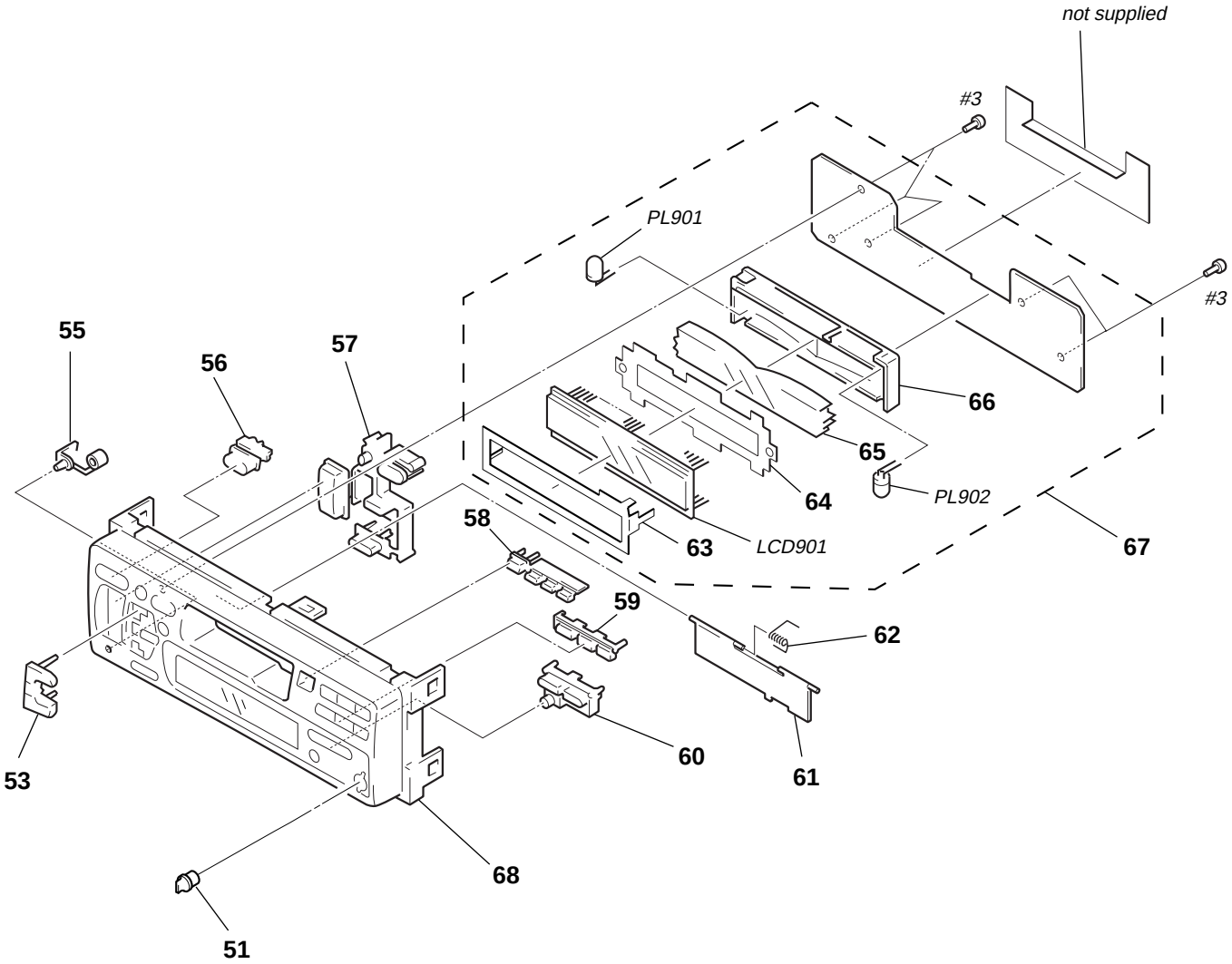
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

(1) CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	X-3373-606-1	CHASSIS ASSY	
* 2	3-012-600-01	INSULATOR	
* 3	A-3313-260-A	MAIN BOARD, COMPLETE	
4	3-915-923-01	SCREW, GROUND POINT	
* 5	3-012-565-01	COVER	
6	1-777-184-11	CORD (WITH CONNECTOR)	
* 7	3-012-598-01	BRACKET (IC)	
* 8	3-012-599-01	HEAT SINK	
9	3-937-650-01	PLATE (C), GROUND	
10	3-934-325-01	SCREW, +K (5X8) TAPPING	
11	3-935-568-01	BRACKET (LOCK)	
12	9-911-840-XX	CUSHION (U)	
* 13	3-014-628-01	CHASSIS, FRONT	
F901	1-533-330-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

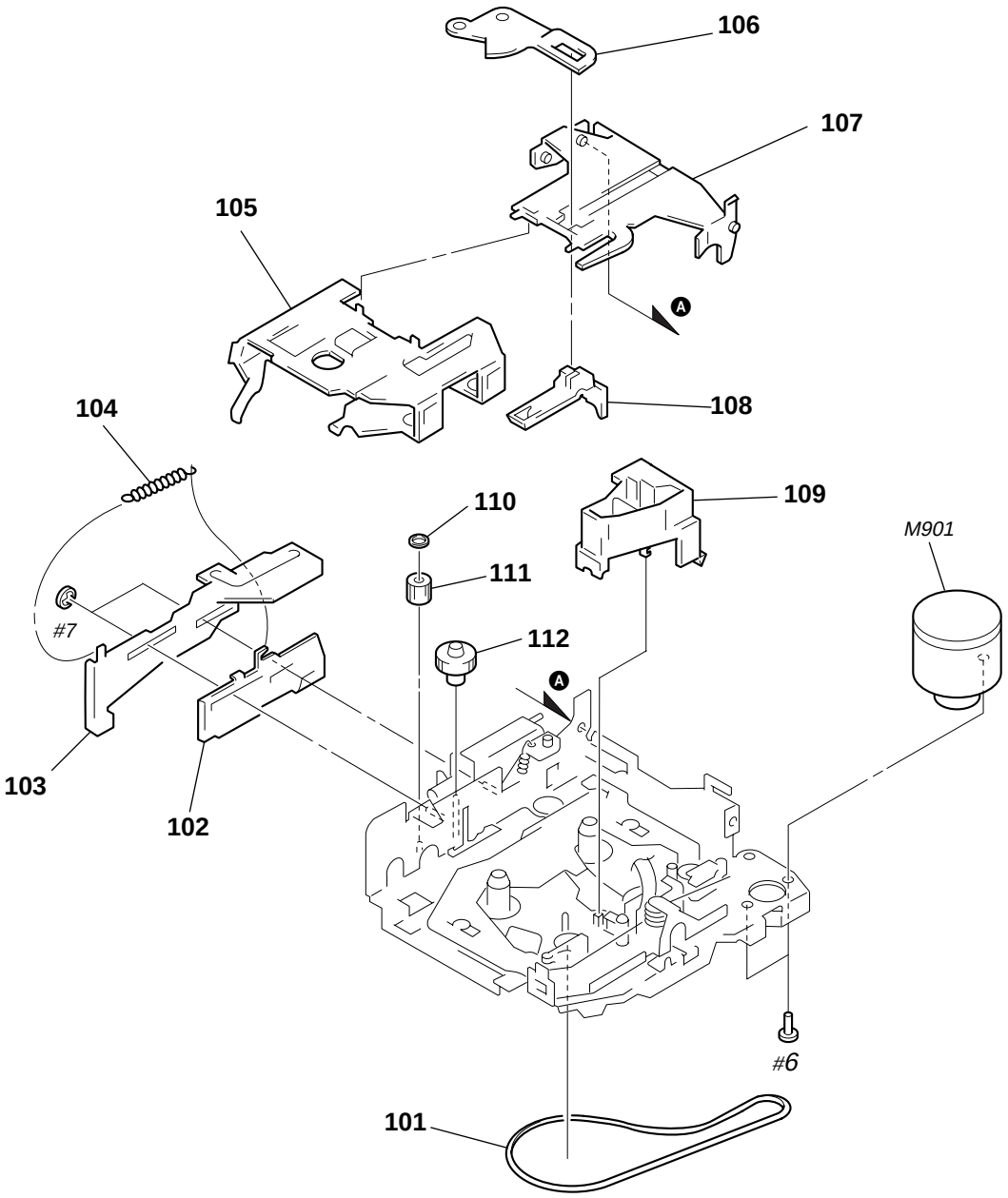
(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-009-301-01	BUTTON (BASS)	
53	3-009-299-01	BUTTON (L) (2) (+.–)	
55	3-012-576-01	BUTTON (RESET)	
56	3-009-300-01	BUTTON (SOURCE)	
57	3-009-297-01	BUTTON (L) (●. OFF. + ▶▶I ▶▶ . SEEK AMS. I◀◀ ◀◀ –. SEL. MUTE)	
58	3-009-308-01	BUTTON (1-3) (⏏. 1. 2. 3)	
59	3-009-309-11	BUTTON (4-6) (4. 5. 6)	
60	3-009-313-01	BUTTON (R) (S) (BTM. LCL. ●)	
61	3-932-205-81	DOOR, CASSETTE	
62	3-935-003-01	SPRING, TORSION	

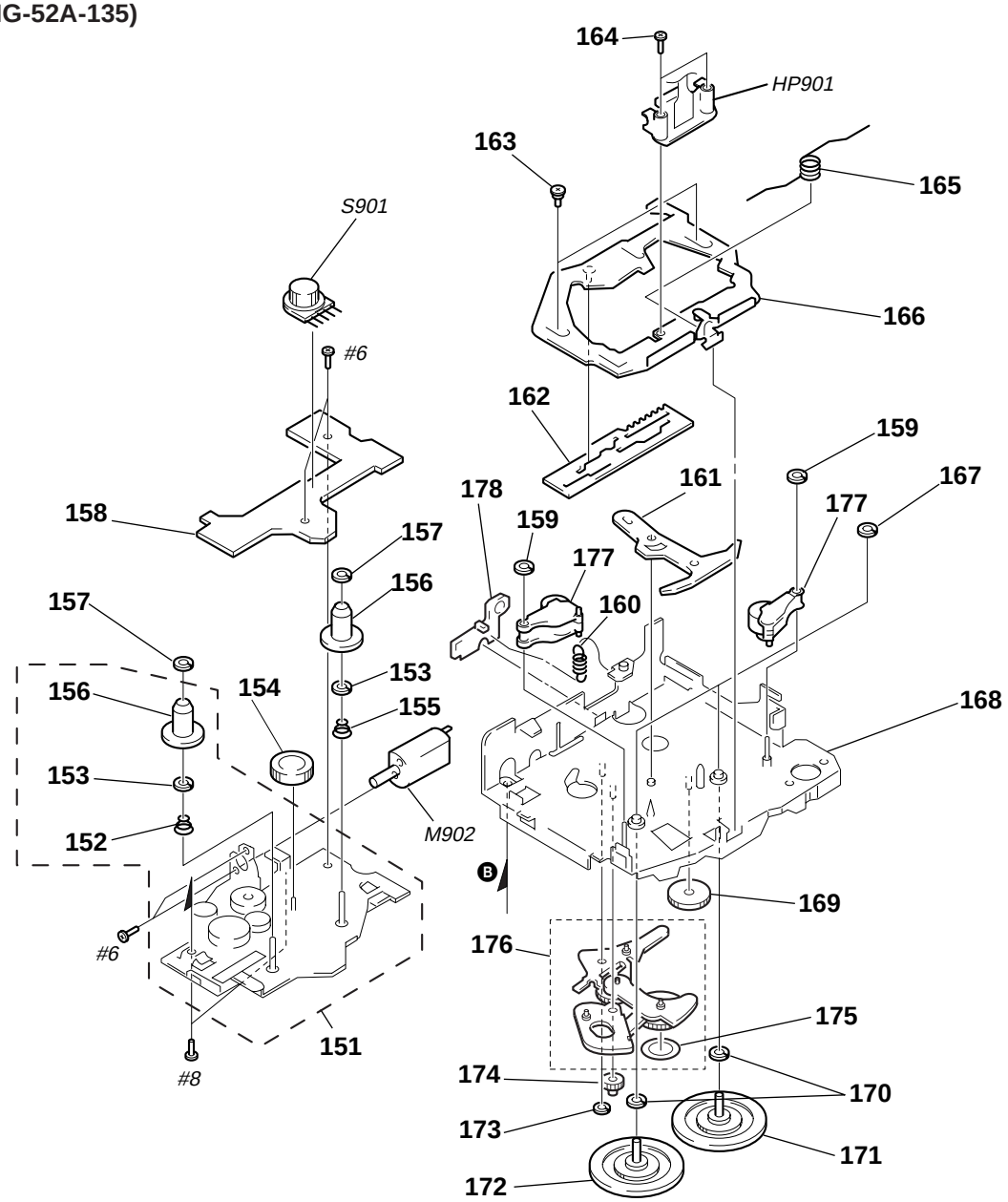
Ref. No.	Part No.	Description	Remark
* 63	3-010-282-01	PLATE (LCD), GROUND	
* 64	3-012-669-01	SHEET (REFLECTOR)	
* 65	3-009-302-01	PLATE (LCD), LIGHT GUIDE	
* 66	3-009-303-02	HOLDER (LCD)	
* 67	A-3294-317-A	CONTROL BOARD, COMPLETE	
68	X-3374-314-1	PANEL SUB ASSY	
LCD901	1-801-678-11	DISPLAY PANEL, LIQUID CRYSTAL	
PL901	1-517-567-11	LAMP, PILOT	
PL902	1-517-567-11	LAMP, PILOT	

(3) MECHANISM DECK SECTION-1 (MG-52A-135)



Ref. No.	Part No.	Description	Remark
101	3-928-675-01	BELT (52)	
* 102	3-928-673-01	LEVER (LDG-A)	
103	3-928-674-01	LEVER (LDG-B)	
104	3-933-341-01	SPRING (LEVER LDG), TENSION	
105	3-928-671-01	HOUSING	
* 106	3-933-347-01	ARM (SUCTION)	
107	3-933-340-01	HANGER	
108	3-933-346-01	CATCHER	
109	3-933-344-01	GUIDE (C)	
110	3-341-753-11	WASHER, POLYETHYLENE	
111	3-933-335-01	GEAR (LDG-FT)	
112	3-928-667-01	GEAR (LDG-A)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

(4) MECHANISM DECK SECTION-2 (MG-52A-135)



Ref. No.	Part No.	Description	Remark
151	X-3371-710-1	CHASSIS (S) ASSY	
152	3-933-337-01	SPRING (B-T-R), CONE COIL	
153	3-701-437-01	POLY-SLIDER (A)	
154	3-933-333-01	GEAR (LDG-E)	
155	3-933-339-01	SPRING (B-T-F), CONE COIL	
156	3-933-345-01	GEAR, REEL	
157	3-954-807-01	WASHER	
158	1-660-169-21	REEL BOARD	
159	3-341-752-11	WASHER, POLYETHYLENE	
160	3-933-336-01	SPRING (ARM HANGER), TENSION	
161	3-928-669-01	LEVER (PINCH SELECTION)	
162	3-928-668-01	LEVER (MODE)	
163	3-933-338-01	SCREW (HP), STEP	
164	3-927-100-01	SCREW (+PS 2X10), SPECIAL	
165	3-928-670-01	SPRING (PINCH PRESS)	
* 166	X-3371-712-1	PLATE SUB ASSY, HEAD	

Ref. No.	Part No.	Description	Remark
167	3-364-151-01	WASHER	
* 168	X-3371-701-1	CHASSIS (M) SUB ASSY (A)	
169	X-3371-707-1	CLUTCH (PLAY) ASSY	
170	3-701-437-21	WASHER	
171	3-930-932-01	FLYWHEEL (F) (SEF)	
172	A-3291-667-A	CLUTCH (FR) ASSY	
173	3-321-813-01	WASHER, COTTER POLYETHYLENE	
174	3-933-343-01	GEAR (REVERSE)	
175	3-933-383-01	SEAL (32), REFLECTION	
176	X-3371-703-1	LEVER (GEAR) ASSY	
177	X-3371-713-2	LEVER (PINCH) ASSY	
178	X-3371-706-2	ARM (HANGER) ASSY	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
M902	A-3291-664-A	MOTOR ASSY, SUB (LOADING/TAPE OPERATION)	
S901	1-692-885-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	

SECTION 2
DIAGRAMS

2-1. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 µPD17707GC-528-3B9 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Function
1	NIL	–	Not used (Fixed at "L")
2, 3	POS3, POS2	I	Tape position detection pin
4, 5	POS0, POS1	I	Tape position detection pin
6	TAPEON	O	Tape power supply control pin
7	CM_ON	O	Capstan motor control pin
8	LM_LOD	O	Loading motor control pin (loadig direction)
9	LM_EJ	O	Loading motor control pin (eject direction)
10	TUNON	O	Tuner power supply control pin
11	FM_ON	O	FM power supply control pin
12	PW_ON	O	System power supply control pin
13	MUTE	O	System muting control pin At muting: "H"
14	VOLCE	O	Chip enable output pin to electrical volume
15	VOLCKO	O	Clock output pin to electrical volume
16	VOLSO	O	Data output pin to electrical volume
17	AMPON	O	Power amp power supply control pin
18	$\overline{\text{AMPMUT}}$	O	Power amp muting control pin At muting: "L"
19	$\overline{\text{DX}}$_LO	O	DX/local selection control pin
20	NC1	–	Not used
21	GND	–	GND
22	DSTSEL	I	Destination setting pin (A/D input) (Fixed at "L")
23	D_BASS	I	D-BASS switch input pin (A/D input)
24,25	KEYIN1,KEYIN0	I	Key input pin (A/D input)
26	RC_IN0	I	Rotary remote commander input pin (A/D input)
27	VSM	I	FM/AM signal meter voltage detection pin (A/D input)
28	AMIFIN	I	AM(MW,SW) IF input pin
29	FMIFIN	I	FM IF input pin
30	VDD	–	Power supply
31	FM_OSC	I	FM OSC signal input pin
32	AM_OSC	I	AM OSC signal input pin
33	GND	–	GND
34	NC2	–	Not used
35	EO1	O	Main charge-pump output pin
36	TEST0	I	Test pin
37	SECU-OUT	O	Not used
38	$\overline{\text{SEKOUT}}$	O	SEEK control signal output pin
39	MW_SW	O	MW/SW power supply select pin
40	BEEP	O	Beep sound output pin
41	KEYACK	O	Key acknowledge signal input pin
42	BU_IN	I	Back up power supply detection pin METAL control input/output pin
43	MTLSEL	I/O	At initial mode: auto/manual selection input of METAL function "L": manual At manual mode: METAL on/off output "H": on At auto mode: input at %ª MTLIN DOLBY control input/output pin
44	DOLON	I/O	At initial mode: valid/invalid selection input of DOLBY function At normal mode: DOLBY on/off output
45	$\overline{\text{AMSIN}}$	I	Tape music with/without detection pin "L": with music
46	ST	I/O	Stereo detection signal input and forced monaural signal output pin

Pin No.	Pin Name	I/O	Function
47	$\overline{\text{AMSON}}$	O	At AMS: "L"
48	$\overline{\text{N}}$_ROUT	O	Forward/reverse control pin
49	TAPMUT	O	Tape muting control pin At muting: "H"
50	ILLON	O	Illumination power supply control pin At PW SEL on: ACC on: "H" At PW SEL off: Power on: "H"
51	SD_IN	I	Station detection signal input pin
52	$\overline{\text{NOSESW}}$	I	Front panel removal or attaching detection pin
53	$\overline{\text{TELMUT}}$	I	Telephone muting detection pin "L": 20dB audio muting
54	REL	I	Reel table rotation detection pin
55	$\overline{\text{ACCIN}}$	I	Accessory voltage detection pin
56	$\overline{\text{TESTIN}}$	I	Test mode setting pin
57	RC_IN1	I	Rotary remote commander input pin (A/D input)
58	PW_SEL	I	Power select switch input pin (Fixed at "H")
59	$\overline{\text{MTLIN}}$	I	AUTO METAL detection pin "L": METAL
60	AD_ON	O	Power supply control pin for A/D conversion
61	KEYSEL	I	Key function setting pin
62	SEKOUTSEL	I	Active select pin for ㊳SEKOUT
63	PULL-OUT	I	Not used
64	LCDCE	O	LCD chip enable output pin
65	LCDCKO	O	LCD clock output pin
66	LCDSO	O	LCD data output pin
67	$\overline{\text{LCDINH}}$	O	LCD brank indication control pin
68	CLK-SEL	I	Not used (Fixed at "L")
69	NC7	–	Not used
70	SECU-SEL	I	Not used (Fixed at "L")
71	NC9	–	Not used
72	NC10	–	Not used
73	NC11	–	Not used
74	VREG	O	CPU regurator output pin
75	GND	–	GND
76	X_OUT	O	System clock output pin (4.5 MHz)
77	X_IN	I	System clock input pin (4.5 MHz)
78	CE	I	Fixed at "H"
79	VDD	–	Power supply
80	$\overline{\text{RESET}}$	I	Reset input pin

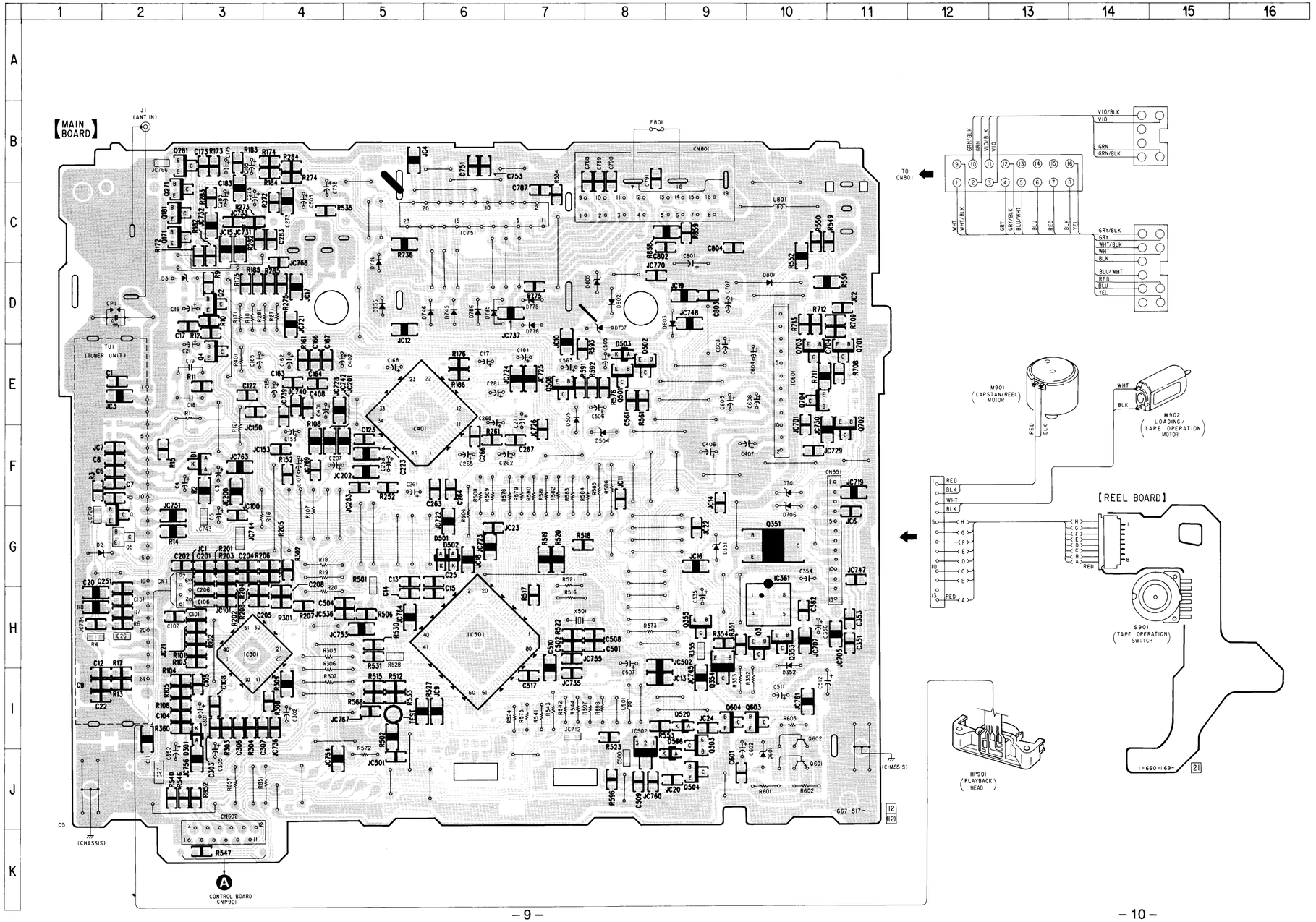
2-2. PRINTED WIRING BOARDS – MAIN Section –

• **Semiconductor Location**

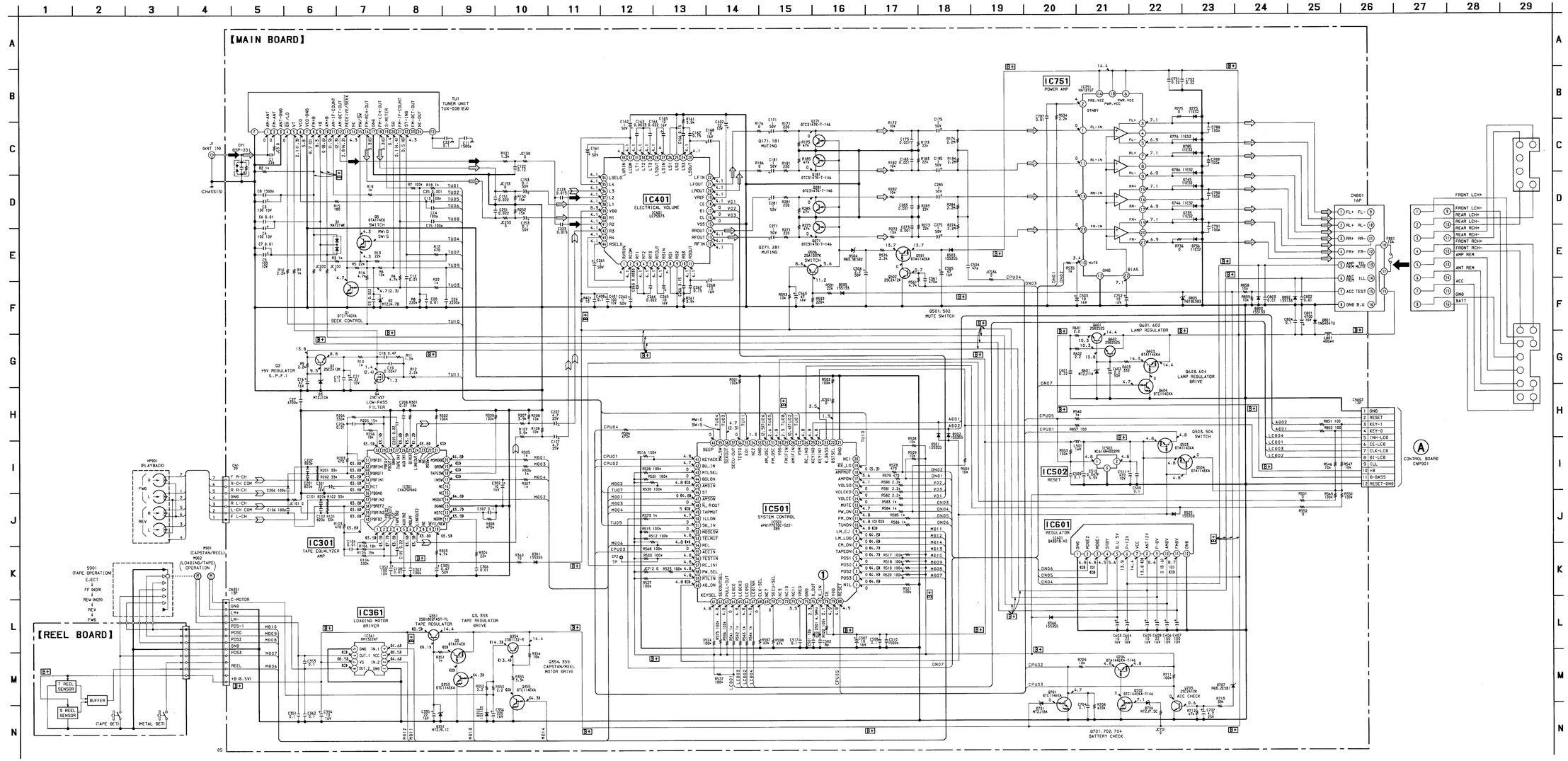
Ref. No.	Location	Ref. No.	Location
D1	F-3	Q1	G-2
D2	G-1	Q2	D-3
D3	D-2	Q3	H-10
D301	I-3	Q4	E-3
D351	G-9	Q5	G-2
D352	H-10	Q171	C-2
D501	G-6	Q181	C-2
D502	G-6	Q271	C-2
D503	E-8	Q281	B-2
D504	F-8	Q351	G-10
D505	E-7	Q353	H-10
D520	I-9	Q354	H-9
D566	J-9	Q355	H-9
D601	J-10	Q501	E-8
D701	F-10	Q502	E-8
D706	G-10	Q503	I-9
D707	D-8	Q504	J-9
D735	D-5	Q506	E-7
D736	C-5	Q601	J-10
D745	D-6	Q602	I-10
D746	D-6	Q603	I-10
D775	D-7	Q604	I-9
D776	D-7	Q701	E-11
D785	D-6	Q702	F-11
D786	D-6	Q703	E-10
D801	D-10	Q704	E-10
D802	D-8		
D803	D-9		
D805	D-8		
IC301	H-3		
IC361	H-10		
IC401	E-5		
IC501	H-6		
IC502	I-8		
IC601	E-10		
IC751	C-6		

Note on Printed Wiring Board:

- o——— : parts extracted from the component side.
- △ : internal component.

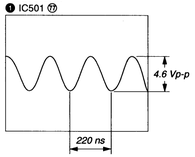


2-3. SCHEMATIC DIAGRAM – MAIN Section –



• Waveform

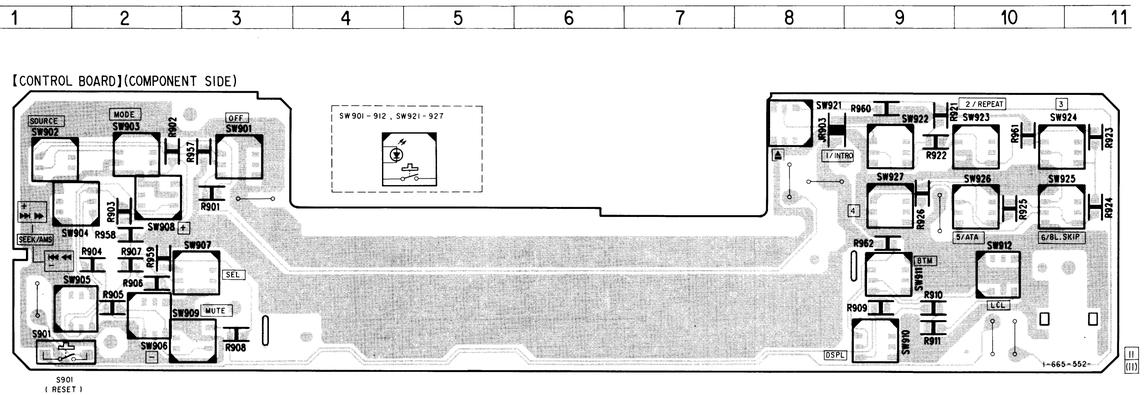
❶ IC501 ⓱



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in W and 1/4 W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from ACC and BATT terminals.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
  << >> : PB (TAPE)
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MW). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM
  Σ : PB (TAPE)

2-4. PRINTED WIRING BOARD – CONTROL Section –



• Semiconductor Location

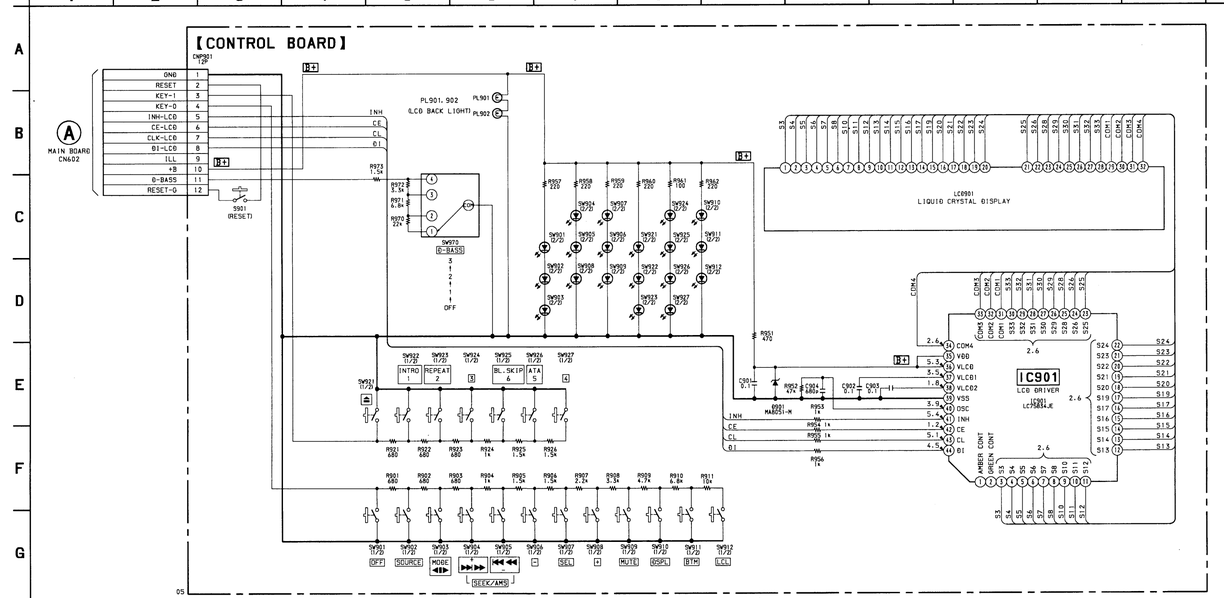
Ref. No.	Location
D901	E-8
IC901	E-6

Note on Printed Wiring Board:
- ⟵ : parts extracted from the component side.
- ▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Conductor Side) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) Parts on the parts face side seen from the parts face are indicated.

2-5. SCHEMATIC DIAGRAM – CONTROL Section –



Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in W and 1/4 W or less unless otherwise specified.
- [ ] : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from ACC and BATT terminals.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MW). Voltage variations may be noted due to normal production tolerances.

SECTION 3
ELECTRICAL PARTS LIST

CONTROL

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3294-317-A	CONTROL BOARD, COMPLETE			
		**********			
*	3-009-302-01	PLATE (LCD), LIGHT GUIDE			
*	3-009-303-02	HOLDER (LCD)			
*	3-010-282-01	PLATE (LCD), GROUND			
*	3-012-669-01	SHEET (REFLECTOR)			
		< CAPACITOR >			
C901	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C902	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C903	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C904	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
		< CONNECTOR >			
CNP901	1-778-960-21	SOCKET, CONNECTOR 12P			
		< DIODE >			
D901	8-719-422-43	DIODE MA8051-H			
		< IC >			
IC901	8-759-443-68	IC LC75834JED			
		< CHIP CONDUCTOR >			
JC901	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC902	1-216-295-11	CONDUCTOR, CHIP (2012)			
JC903	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC904	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC905	1-216-295-11	CONDUCTOR, CHIP (2012)			
JC906	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC907	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC908	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC909	1-216-296-00	CONDUCTOR, CHIP (3216)			
JC910	1-216-296-00	CONDUCTOR, CHIP (3216)			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-801-678-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL901	1-517-567-11	LAMP, PILOT			
PL902	1-517-567-11	LAMP, PILOT			

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R901	1-216-045-00	METAL CHIP	680	5%	1/10W
R902	1-216-045-00	METAL CHIP	680	5%	1/10W
R903	1-216-045-00	METAL CHIP	680	5%	1/10W
R904	1-216-049-11	METAL CHIP	1K	5%	1/10W
R905	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R906	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R907	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R908	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R909	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R910	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R911	1-216-073-00	METAL CHIP	10K	5%	1/10W
R921	1-216-045-00	METAL CHIP	680	5%	1/10W
R922	1-216-045-00	METAL CHIP	680	5%	1/10W
R923	1-216-045-00	METAL CHIP	680	5%	1/10W
R924	1-216-049-11	METAL CHIP	1K	5%	1/10W
R925	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R926	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R951	1-216-041-00	METAL CHIP	470	5%	1/10W
R952	1-216-089-00	METAL CHIP	47K	5%	1/10W
R953	1-216-049-11	METAL CHIP	1K	5%	1/10W
R954	1-216-049-11	METAL CHIP	1K	5%	1/10W
R955	1-216-049-11	METAL CHIP	1K	5%	1/10W
R956	1-216-049-11	METAL CHIP	1K	5%	1/10W
R957	1-216-033-00	METAL CHIP	220	5%	1/10W
R958	1-216-033-00	METAL CHIP	220	5%	1/10W
R959	1-216-033-00	METAL CHIP	220	5%	1/10W
R960	1-216-033-00	METAL CHIP	220	5%	1/10W
R961	1-216-025-00	METAL CHIP	100	5%	1/10W
R962	1-216-033-00	METAL CHIP	220	5%	1/10W
R970	1-216-081-00	METAL CHIP	22K	5%	1/10W
R971	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R972	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R973	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
		< SWITCH >			
S901	1-692-431-21	SWITCH, TACTILE (RESET)			
SW901	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (OFF)			
SW902	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)			
SW903	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MODE)			
SW904	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (+▶▶I ▶▶: SEEK/AMS)			
SW905	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (–I◀◀ ◀◀: SEEK/AMS)			

CONTROL | MAIN

Ref. No.	Part No.	Description	Remark
SW906	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (–)	
SW907	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SEL)	
SW908	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (+)	
SW909	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MUTE)	
SW910	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DSPL)	
SW911	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (BTM)	
SW912	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (LCL)	
SW921	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (⏏)	
SW922	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (1/INTRO)	
SW923	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (2/REPEAT)	
SW924	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (3)	
SW925	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (6/BL.SKIP)	
SW926	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (5/ATA)	
SW927	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (4)	
SW970	1-762-937-11	SWITCH, ROTARY (D-BASS)	

****

*	A-3313-260-A	MAIN BOARD, COMPLETE	
		**********	
*	3-012-598-01	BRACKET (IC)	
*	3-012-599-01	HEAT SINK	
	7-685-793-09	SCREW +PTT 2.6X8 (S)	
	7-685-794-09	SCREW +PTT 2.6X10 (S)	

< CAPACITOR >

C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3	1-124-584-00	ELECT	100uF	20%	10V
C4	1-124-584-00	ELECT	100uF	20%	10V
C5	1-124-584-00	ELECT	100uF	20%	10V
C6	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C7	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C8	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C9	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C11	1-163-049-11	CERAMIC CHIP	0.0015uF	10%	50V
C12	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C13	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C14	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C15	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C16	1-124-589-11	ELECT	47uF	20%	16V
C17	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C18	1-136-173-00	FILM	0.47uF	5%	50V
C19	1-137-368-11	FILM	0.0047uF	5%	50V
C20	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C21	1-128-054-11	ELECT	22uF	20%	10V
C22	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C25	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C26	1-163-013-11	CERAMIC CHIP	0.0022uF	10%	50V
C27	1-163-055-00	CERAMIC CHIP	0.0047uF	10%	50V
C101	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C102	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C104	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C105	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C106	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C107	1-126-163-11	ELECT	4.7uF	20%	50V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C122	1-164-348-11	CERAMIC CHIP	0.12uF	10%	25V
C123	1-163-023-00	CERAMIC CHIP	0.015uF	10%	50V
C151	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C153	1-124-463-00	ELECT	0.1uF	20%	50V
C161	1-126-301-11	ELECT	1uF	20%	50V
C162	1-126-301-11	ELECT	1uF	20%	50V
C163	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C164	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C165	1-126-157-11	ELECT	10uF	20%	16V
C166	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C167	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C168	1-126-157-11	ELECT	10uF	20%	16V
C171	1-126-160-11	ELECT	1uF	20%	50V
C173	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C175	1-126-160-11	ELECT	1uF	20%	50V
C181	1-126-160-11	ELECT	1uF	20%	50V
C183	1-163-205-00	CERAMIC CHIP	0.001uF	10%	50V
C185	1-126-160-11	ELECT	1uF	20%	50V
C201	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C202	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C204	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C205	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C206	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C207	1-126-163-11	ELECT	4.7uF	20%	50V
C208	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C223	1-163-061-00	CERAMIC CHIP	0.015uF	10%	50V
C251	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C253	1-124-463-00	ELECT	0.1uF	20%	50V
C261	1-126-301-11	ELECT	1uF	20%	50V
C262	1-126-301-11	ELECT	1uF	20%	50V
C263	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C264	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C265	1-126-157-11	ELECT	10uF	20%	16V
C266	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C267	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C268	1-126-157-11	ELECT	10uF	20%	16V
C271	1-126-160-11	ELECT	1uF	20%	50V
C273	1-163-205-00	CERAMIC CHIP	0.001uF	10%	50V
C275	1-126-160-11	ELECT	1uF	20%	50V
C281	1-126-160-11	ELECT	1uF	20%	50V
C283	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C285	1-126-160-11	ELECT	1uF	20%	50V
C301	1-124-234-00	ELECT	22uF	20%	16V
C302	1-126-157-11	ELECT	10uF	20%	16V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C305	1-126-159-11	ELECT	0.47uF	20%	50V
C306	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C307	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C335	1-124-234-00	ELECT	22uF	20%	16V
C351	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C352	1-124-584-00	ELECT	100uF	20%	10V
C353	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C354	1-126-157-11	ELECT	10uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C362	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C401	1-124-584-00	ELECT	100uF	20%	10V
C402	1-124-228-11	ELECT	22uF	20%	10V
C406	1-124-584-11	ELECT	100uF	20%	10V
C407	1-124-584-11	ELECT	100uF	20%	10V
C408	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V

Ref. No.	Part No.	Description			Remark
C500	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C501	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C502	1-163-091-00	CERAMIC CHIP	8PF	0.5PF	50V
C503	1-126-157-11	ELECT	10uF	20%	16V
C504	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C505	1-124-589-11	ELECT	47uF	20%	16V
C506	1-124-257-00	ELECT	2.2uF	20%	50V
C507	1-126-157-11	ELECT	10uF	20%	16V
C508	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C509	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C510	1-163-049-11	CERAMIC CHIP	0.0015uF	10%	50V
C511	1-126-925-11	ELECT	470uF	20%	10V
C512	1-115-589-11	ELECT(BLOCK)	0.047uF		5.5V
C517	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C561	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C563	1-124-589-11	ELECT	47uF	20%	16V
C601	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C602	1-124-257-00	ELECT	2.2uF	20%	50V
C603	1-126-157-11	ELECT	10uF	20%	16V
C604	1-124-234-00	ELECT	22uF	20%	16V
C605	1-126-157-11	ELECT	10uF	20%	16V
C608	1-124-234-00	ELECT	22uF	20%	16V
C704	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C707	1-126-163-11	ELECT	4.7uF	20%	50V
C751	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C752	1-126-157-11	ELECT	10uF	20%	16V
C753	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C787	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C788	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C789	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C790	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C791	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C801	1-113-501-11	ELECT	4700uF	20%	16V
C802	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C803	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C804	1-163-038-00	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN1	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN602	1-770-407-11	CONNECTOR, BOARD TO BOARD 12P			
CN801	1-774-701-11	PIN, CONNECTOR 16P			
		< CONPOSITION CIRCUIT BLOCK >			
CP1	1-519-504-11	GAP, DISCHARGE			
		< DIODE >			
D1	8-719-040-04	DIODE MA721WK-(TX)			
D2	8-719-010-34	DIODE UZ-4.7BSC			
D3	8-719-048-54	DIODE MTZJ-T-77-10A			
D301	8-719-988-62	DIODE 1SS355			
D351	8-719-110-14	DIODE RD9.1ESB3			
D352	8-719-991-33	DIODE 1SS133T-77			
D501	8-719-988-62	DIODE 1SS355			
D502	8-719-988-62	DIODE 1SS355			
D503	8-719-988-62	DIODE 1SS355			
D504	8-719-109-72	DIODE RD3.9ESB2			

Ref. No.	Part No.	Description	Remark
D505	8-719-991-33	DIODE 1SS133T-77	
D520	8-719-988-62	DIODE 1SS355	
D566	8-719-988-62	DIODE 1SS355	
D601	8-719-923-74	DIODE MTZJ-T-77-11A	
D701	8-719-110-49	DIODE RD18ESB2	
D706	8-719-110-03	DIODE RD7.5ESB2	
D707	8-719-110-06	DIODE RD8.2ESB1	
D735	8-719-200-82	DIODE 11ES2	
D736	8-719-200-82	DIODE 11ES2	
D745	8-719-200-82	DIODE 11ES2	
D746	8-719-200-82	DIODE 11ES2	
D775	8-719-200-82	DIODE 11ES2	
D776	8-719-200-82	DIODE 11ES2	
D785	8-719-200-82	DIODE 11ES2	
D786	8-719-200-82	DIODE 11ES2	
D801	8-719-049-38	DIODE 1N5404TU	
D802	8-719-991-33	DIODE 1SS133T-77	
D803	8-719-991-33	DIODE 1SS133T-77	
D805	8-719-110-49	DIODE RD18ESB2	
		< IC >	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC361	8-759-395-97	IC MM1322XFBE	
IC401	8-759-443-67	IC LC75373ED	
IC501	8-759-485-78	IC uPD17707GC-528-3B9	
IC502	8-759-363-81	IC XC61AN4002PR	
IC601	8-759-347-49	IC BA3918-V2	
IC751	8-759-448-48	IC HA13157	
		< JACK >	
J1	1-764-808-14	JACK (ANT) (ANT IN)	
		< CHIP CONDUCTOR >	
JC1	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC2	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC3	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC4	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC6	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC7	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC9	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC10	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC11	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC12	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC13	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC14	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC15	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC16	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC17	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC18	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC19	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC20	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC21	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC22	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC23	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC24	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC100	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC101	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC150	1-216-295-11	CONDUCTOR, CHIP (2012)	

MAIN

Ref. No.	Part No.	Description	Remark
JC153	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC200	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC201	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC202	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC253	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC501	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC502	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC536	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC701	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC705	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC707	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC712	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC719	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC720	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC721	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC722	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC723	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC724	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC725	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC726	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC728	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC729	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC730	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC731	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC732	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC733	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC734	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC735	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC736	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC737	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC739	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC740	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC742	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC743	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC744	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC745	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC747	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC748	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC751	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC753	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC754	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC755	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC756	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC760	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC761	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC763	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC764	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC766	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC767	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC768	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC769	1-216-295-11	CONDUCTOR, CHIP (2012)	
JC770	1-216-295-11	CONDUCTOR, CHIP (2012)	
		< COIL >	
L501	1-414-142-11	MICRO INDUCTOR 1uH	
L801	1-416-046-11	COIL, CHOKE 400uH	

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q1	8-729-900-53	TRANSISTOR DTC114EK			
Q2	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q3	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q4	8-729-021-94	TRANSISTOR 2SK1657-T1B			
Q5	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q171	8-729-920-21	TRANSISTOR DTC314TKH04			
Q181	8-729-920-21	TRANSISTOR DTC314TKH04			
Q271	8-729-920-21	TRANSISTOR DTC314TKH04			
Q281	8-729-920-21	TRANSISTOR DTC314TKH04			
Q351	8-729-015-11	TRANSISTOR 2SD1802FAST-TL			
Q353	8-729-900-53	TRANSISTOR DTC114EK			
Q354	8-729-106-60	TRANSISTOR 2SB1115A			
Q355	8-729-900-53	TRANSISTOR DTC114EK			
Q501	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q502	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q503	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q504	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q506	8-729-216-22	TRANSISTOR 2SA1162-G			
Q601	8-729-026-68	TRANSISTOR 2SD2525(TP)			
Q602	8-729-026-68	TRANSISTOR 2SD2525(TP)			
Q603	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q604	8-729-900-53	TRANSISTOR DTC114EK			
Q701	8-729-900-53	TRANSISTOR DTC114EK			
Q702	8-729-027-59	TRANSISTOR DTC144EKA-T146			
Q703	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q704	8-729-027-38	TRANSISTOR DTA144EKA-T146			
		< RESISTOR >			
R1	1-249-417-11	CARBON	1K	5%	1/4W
R2	1-216-198-00	METAL CHIP	1K	5%	1/8W
R3	1-216-049-11	METAL CHIP	1K	5%	1/10W
R4	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R5	1-216-081-00	METAL CHIP	22K	5%	1/10W
R6	1-216-073-00	METAL CHIP	10K	5%	1/10W
R7	1-216-097-00	METAL CHIP	100K	5%	1/10W
R8	1-216-254-00	METAL CHIP	220K	5%	1/8W
R9	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R10	1-216-049-11	METAL CHIP	1K	5%	1/10W
R11	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R12	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R13	1-216-081-00	METAL CHIP	22K	5%	1/10W
R14	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
R15	1-216-031-00	METAL CHIP	180	5%	1/10W
R16	1-249-421-11	CARBON	2.2K	5%	1/4W
R17	1-216-041-00	METAL CHIP	470	5%	1/10W
R18	1-249-417-11	CARBON	1K	5%	1/4W
R19	1-249-417-11	CARBON	1K	5%	1/4W
R20	1-249-417-11	CARBON	1K	5%	1/4W
R101	1-216-085-00	METAL CHIP	33K	5%	1/10W
R102	1-216-097-00	METAL CHIP	100K	5%	1/10W
R103	1-216-041-00	METAL CHIP	470	5%	1/10W
R104	1-216-109-00	METAL CHIP	330K	5%	1/10W
R105	1-216-077-00	METAL CHIP	15K	5%	1/10W
R106	1-216-079-00	METAL CHIP	18K	5%	1/10W
R107	1-249-424-11	CARBON	3.9K	5%	1/4W
R108	1-216-222-00	METAL CHIP	10K	5%	1/8W

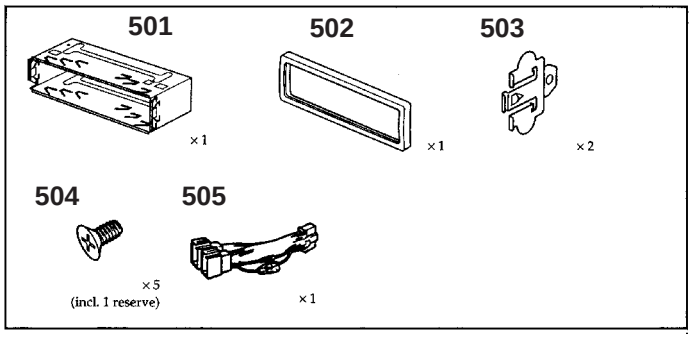
Ref. No.	Part No.	Description			Remark
R121	1-249-418-11	CARBON	1.2K	5%	1/4W
R152	1-216-077-00	METAL CHIP	15K	5%	1/10W
R161	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R171	1-249-409-11	CARBON	220	5%	1/4W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-081-00	METAL CHIP	22K	5%	1/10W
R174	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R175	1-216-089-00	METAL CHIP	47K	5%	1/10W
R176	1-216-295-11	CONDUCTOR, CHIP		(2012)	
R181	1-249-409-11	CARBON	220	5%	1/4W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-081-00	METAL CHIP	22K	5%	1/10W
R184	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R185	1-216-089-00	METAL CHIP	47K	5%	1/10W
R186	1-216-295-11	CONDUCTOR, CHIP		(2012)	
R201	1-216-085-00	METAL CHIP	33K	5%	1/10W
R202	1-216-085-00	METAL CHIP	33K	5%	1/10W
R203	1-216-041-00	METAL CHIP	470	5%	1/10W
R204	1-216-109-00	METAL CHIP	330K	5%	1/10W
R205	1-216-077-00	METAL CHIP	15K	5%	1/10W
R206	1-216-079-00	METAL CHIP	18K	5%	1/10W
R207	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R208	1-216-073-00	METAL CHIP	10K	5%	1/10W
R252	1-216-077-00	METAL CHIP	15K	5%	1/10W
R261	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R271	1-249-409-11	CARBON	220	5%	1/4W
R272	1-216-073-00	METAL CHIP	10K	5%	1/10W
R273	1-216-081-00	METAL CHIP	22K	5%	1/10W
R274	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R275	1-216-089-00	METAL CHIP	47K	5%	1/10W
R281	1-249-409-11	CARBON	220	5%	1/4W
R282	1-216-073-00	METAL CHIP	10K	5%	1/10W
R283	1-216-081-00	METAL CHIP	22K	5%	1/10W
R284	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R285	1-216-089-00	METAL CHIP	47K	5%	1/10W
R301	1-216-079-00	METAL CHIP	18K	5%	1/10W
R302	1-216-097-00	METAL CHIP	100K	5%	1/10W
R303	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R304	1-216-081-00	METAL CHIP	22K	5%	1/10W
R305	1-249-417-11	CARBON	1K	5%	1/4W
R306	1-249-417-11	CARBON	1K	5%	1/4W
R307	1-249-417-11	CARBON	1K	5%	1/4W
R308	1-216-113-00	METAL CHIP	470K	5%	1/10W
R309	1-216-246-00	METAL CHIP	100K	5%	1/8W
R351	1-216-049-11	METAL CHIP	1K	5%	1/10W
R352	1-249-385-11	CARBON	2.2	5%	1/6W
R353	1-249-385-11	CARBON	2.2	5%	1/6W
R354	1-216-073-00	METAL CHIP	10K	5%	1/10W
R355	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R360	1-216-001-00	METAL CHIP	10	5%	1/10W
R401	1-249-393-11	CARBON	10	5%	1/4W
R501	1-216-097-00	METAL CHIP	100K	5%	1/10W
R502	1-216-246-00	METAL CHIP	100K	5%	1/8W
R504	1-249-429-11	CARBON	10K	5%	1/4W
R506	1-216-113-00	METAL CHIP	470K	5%	1/10W
R508	1-249-429-11	CARBON	10K	5%	1/4W
R509	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R512	1-216-097-00	METAL CHIP	100K	5%	1/10W
R515	1-216-097-00	METAL CHIP	100K	5%	1/10W
R516	1-249-441-11	CARBON	100K	5%	1/4W
R517	1-216-097-00	METAL CHIP	100K	5%	1/10W
R518	1-216-097-00	METAL CHIP	100K	5%	1/10W
R519	1-216-246-00	METAL CHIP	100K	5%	1/8W
R520	1-216-246-00	METAL CHIP	100K	5%	1/8W
R521	1-249-441-11	CARBON	100K	5%	1/4W
R522	1-216-097-00	METAL CHIP	100K	5%	1/10W
R523	1-216-097-00	METAL CHIP	100K	5%	1/10W
R524	1-249-441-11	CARBON	100K	5%	1/4W
R527	1-216-246-00	METAL CHIP	100K	5%	1/8W
R528	1-216-097-00	METAL CHIP	100K	5%	1/10W
R530	1-216-097-00	METAL CHIP	100K	5%	1/10W
R531	1-216-097-00	METAL CHIP	100K	5%	1/10W
R533	1-216-097-00	METAL CHIP	100K	5%	1/10W
R534	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R535	1-216-049-11	METAL CHIP	1K	5%	1/10W
R540	1-216-049-11	METAL CHIP	1K	5%	1/10W
R541	1-249-417-11	CARBON	1K	5%	1/4W
R542	1-249-417-11	CARBON	1K	5%	1/4W
R543	1-249-417-11	CARBON	1K	5%	1/4W
R544	1-249-417-11	CARBON	1K	5%	1/4W
R546	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R547	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R549	1-216-246-00	METAL CHIP	100K	5%	1/10W
R550	1-216-246-00	METAL CHIP	100K	5%	1/10W
R551	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R552	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R553	1-216-097-00	METAL CHIP	100K	5%	1/10W
R561	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R568	1-216-097-00	METAL CHIP	100K	5%	1/10W
R572	1-249-441-11	CARBON	100K	5%	1/4W
R573	1-249-417-11	CARBON	1K	5%	1/4W
R575	1-249-441-11	CARBON	100K	5%	1/4W
R576	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R578	1-249-413-11	CARBON	470	5%	1/4W
R579	1-249-413-11	CARBON	470	5%	1/4W
R580	1-249-421-11	CARBON	2.2K	5%	1/4W
R581	1-249-421-11	CARBON	2.2K	5%	1/4W
R582	1-249-421-11	CARBON	2.2K	5%	1/4W
R583	1-249-417-11	CARBON	1K	5%	1/4W
R584	1-249-417-11	CARBON	1K	5%	1/4W
R585	1-249-417-11	CARBON	1K	5%	1/4W
R586	1-249-417-11	CARBON	1K	5%	1/4W
R591	1-216-081-00	METAL CHIP	22K	5%	1/10W
R592	1-216-105-00	METAL CHIP	220K	5%	1/10W
R593	1-216-073-00	METAL CHIP	10K	5%	1/10W
R596	1-216-097-00	METAL CHIP	100K	5%	1/10W
R597	1-249-437-11	CARBON	47K	5%	1/4W
R598	1-249-437-11	CARBON	47K	5%	1/4W
R601	1-249-385-11	CARBON	2.2	5%	1/6W
R602	1-249-385-11	CARBON	2.2	5%	1/6W
R603	1-249-411-11	CARBON	330	5%	1/4W
R708	1-216-113-00	METAL CHIP	470K	5%	1/10W
R709	1-216-073-00	METAL CHIP	10K	5%	1/10W
R711	1-216-246-00	METAL CHIP	100K	5%	1/8W
R712	1-216-089-00	METAL CHIP	47K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R713	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R736	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R775	1-216-295-11	CONDUCTOR, CHIP		(2012)	
R851	1-247-807-31	CARBON	100	5%	1/4W
R852	1-216-025-00	METAL CHIP	100	5%	1/10W
R857	1-247-807-31	CARBON	100	5%	1/4W
R858	1-216-222-00	METAL CHIP	10K	5%	1/8W
R859	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< TUNER >			
TU1	A-3282-019-A	TUNER UNIT TUX-008 (EA)			
		< VIBRATOR >			
X501	1-578-785-11	VIBRATOR, CRYSTAL (4.5MHz)			
		MISCELLANEOUS			
		**********			
6	1-777-184-11	CORD (WITH CONNECTOR)			
158	1-660-169-21	REEL BOARD			
F901	1-533-330-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)			
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)			
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)			
M902	A-3291-664-A	MOTOR ASSY, SUB (LOADING/TAPE OPERATION)			
S901	1-692-885-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)			
		**********			
		HARDWARE LIST			
		**********			
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)			
#2	7-685-794-09	SCREW +PTT 2.6X10 (S)			
#3	7-685-105-19	TPG +P 2X8, TYPE 2, NON-SLIT			
#4	7-685-793-09	SCREW +PTT 2.6X8 (S)			
#6	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3			
#7	7-624-104-04	STOP RING 2.0, TYPE -E			
#8	7-628-253-00	SCREW +PS 2X4			
		ACCESSORIES & PACKING MATERIALS			
		**********			
	3-861-084-11	MANUAL, INSTRUCTION (ARABIC, ENGLISH)			

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	X-3374-313-1	FRAME ASSY	
502	3-017-038-01	COLLAR (B)	
503	3-935-568-01	BRACKET (LOCK)	
504	3-934-325-01	SCREW, +K (5X8) TAPPING	
505	1-777-184-11	CORD (WITH CONNECTOR)	



XR-T200

SONY

Saudi Arabia Model

SERVICE MANUAL

SUPPLEMENT-1

File this supplement with the service manual.

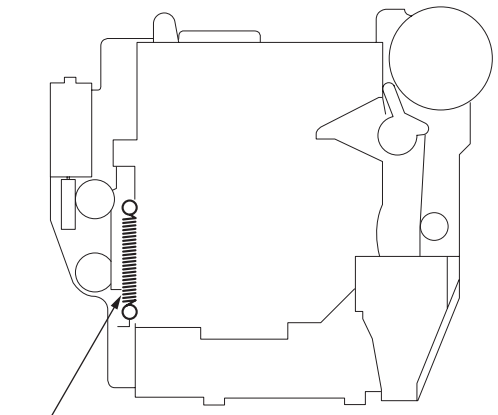
Subject : Changed Mechanism Deck

(ECN-CS703771)

The type of mechanism deck was changed from MG-52A-135 to MG-25E-136 on the way of production. When servicing the new type of mechanism deck, refer to this service manual supplement-1.

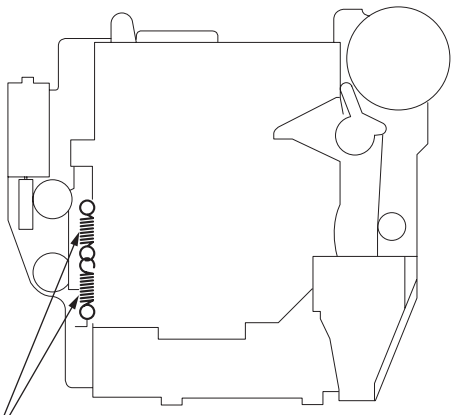
• How to distinguish between former and new types :

Former Type : MG-52A-135



Spring (1 place)

New Type : MG-25E-136

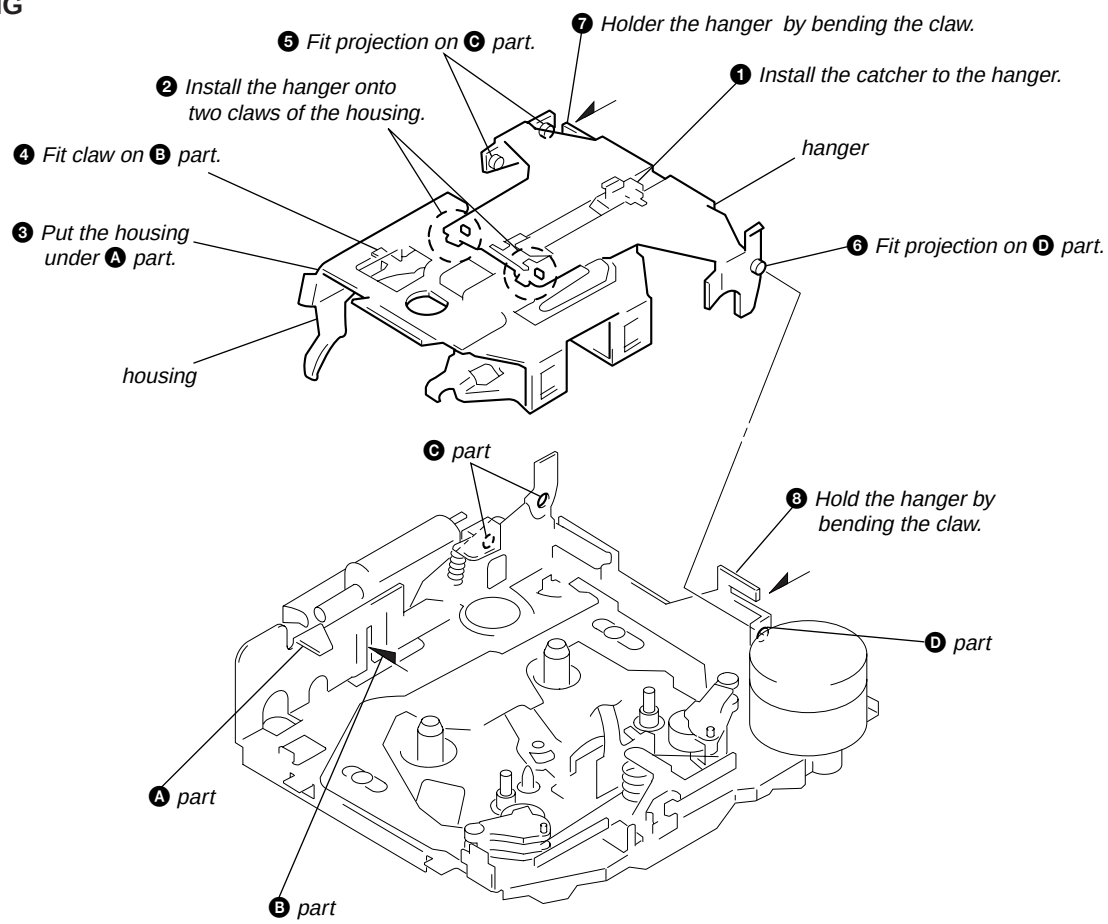


Spring (2 places)

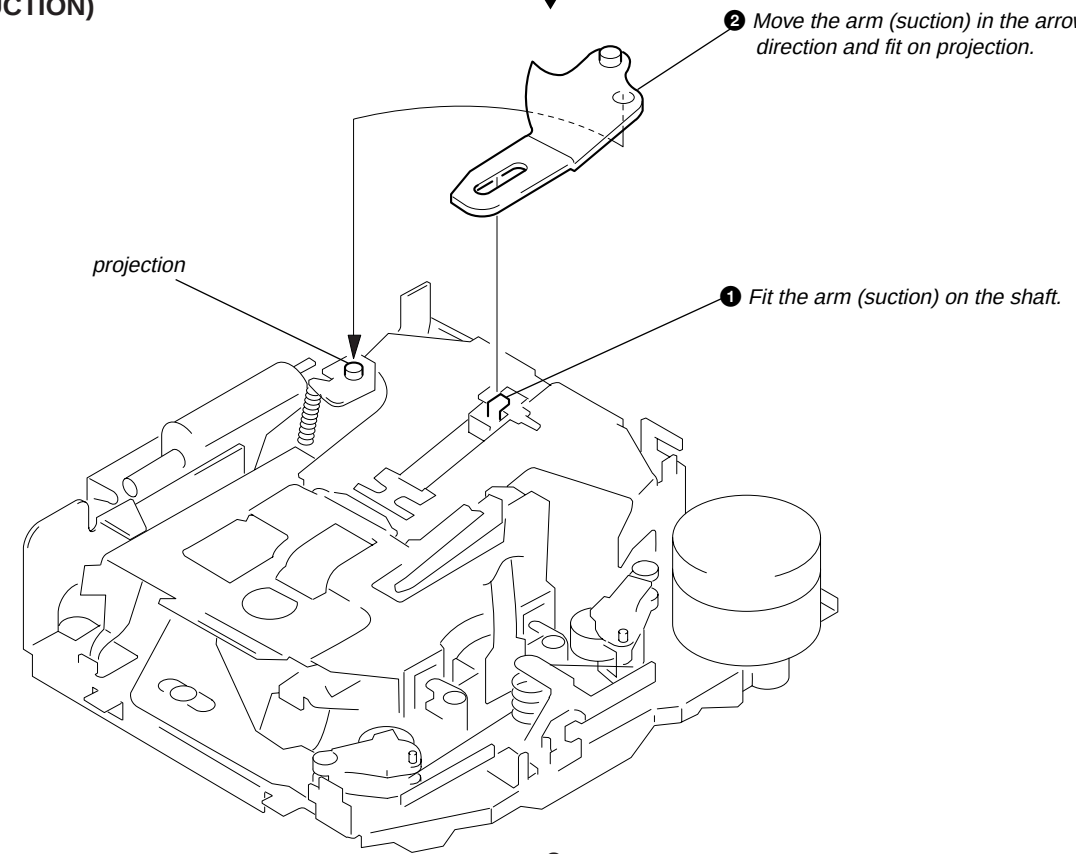
ASSEMBLY OF MECHANISM DECK

Note : Follow the assembly procedure in the numerical order given.

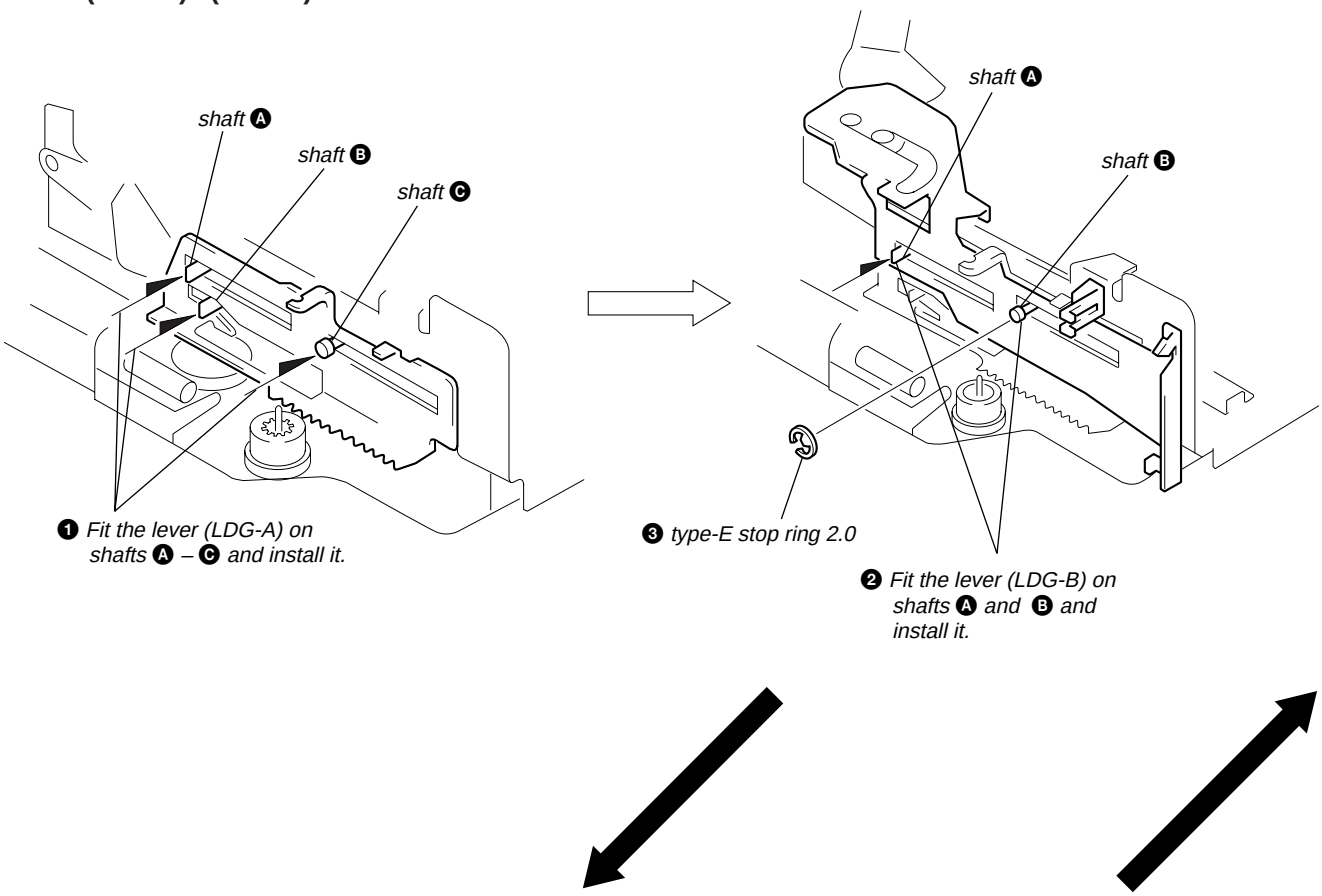
HOUSING


❺ Fit projection on Ⓒ part.
❼ Holder the hanger by bending the claw.
❶ Install the catcher to the hanger.
❷ Install the hanger onto two claws of the housing.
❹ Fit claw on Ⓑ part.
hanger
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

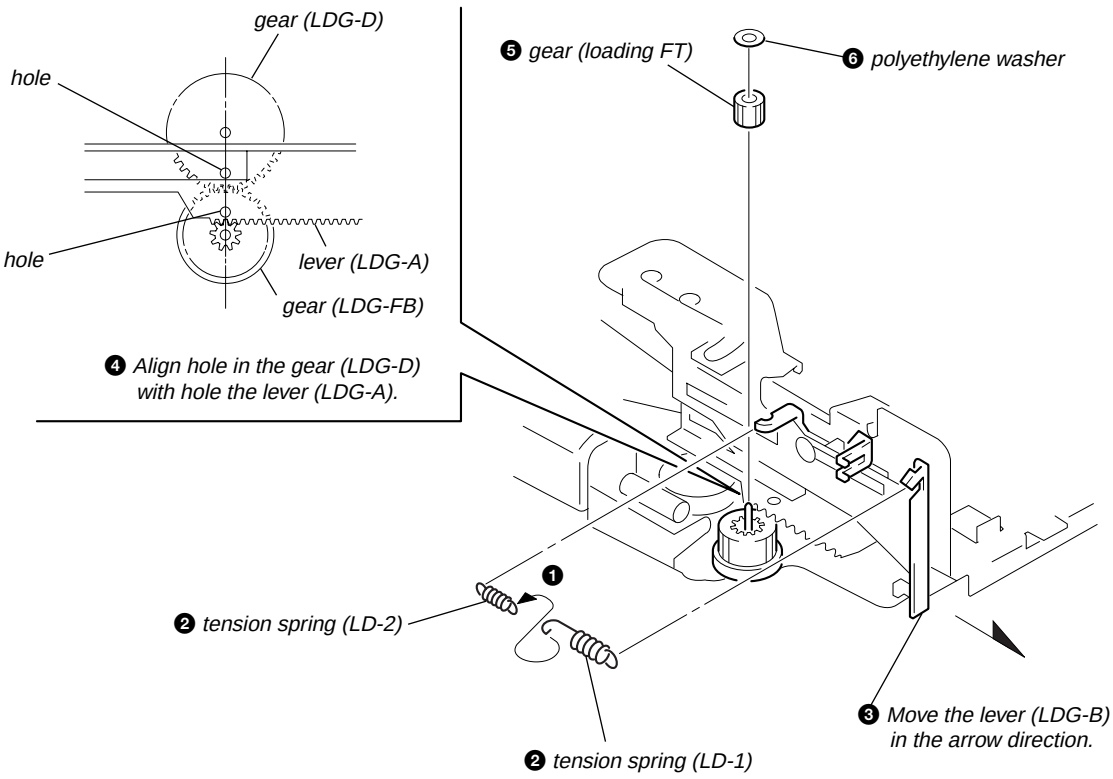
ARM (SUCTION)



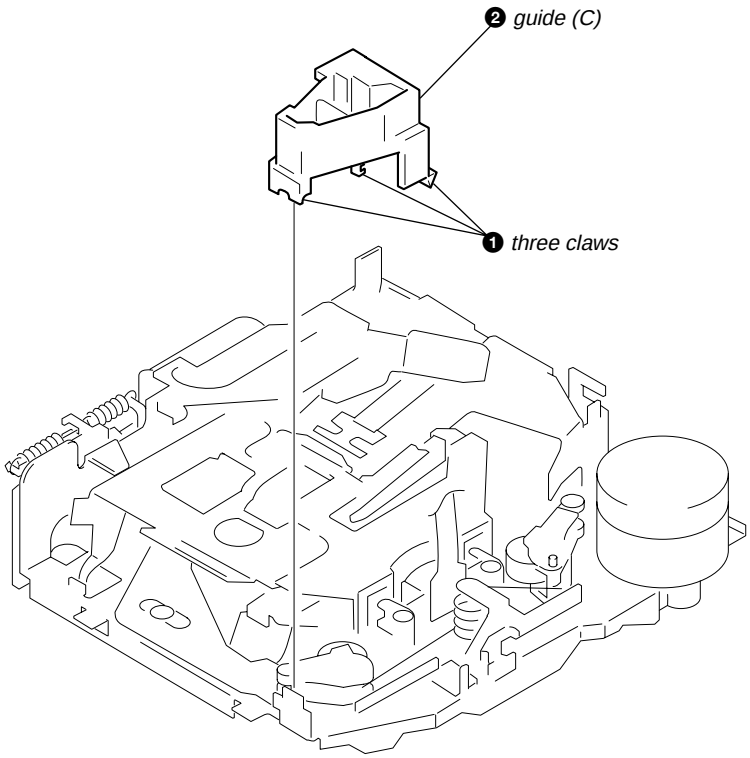
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

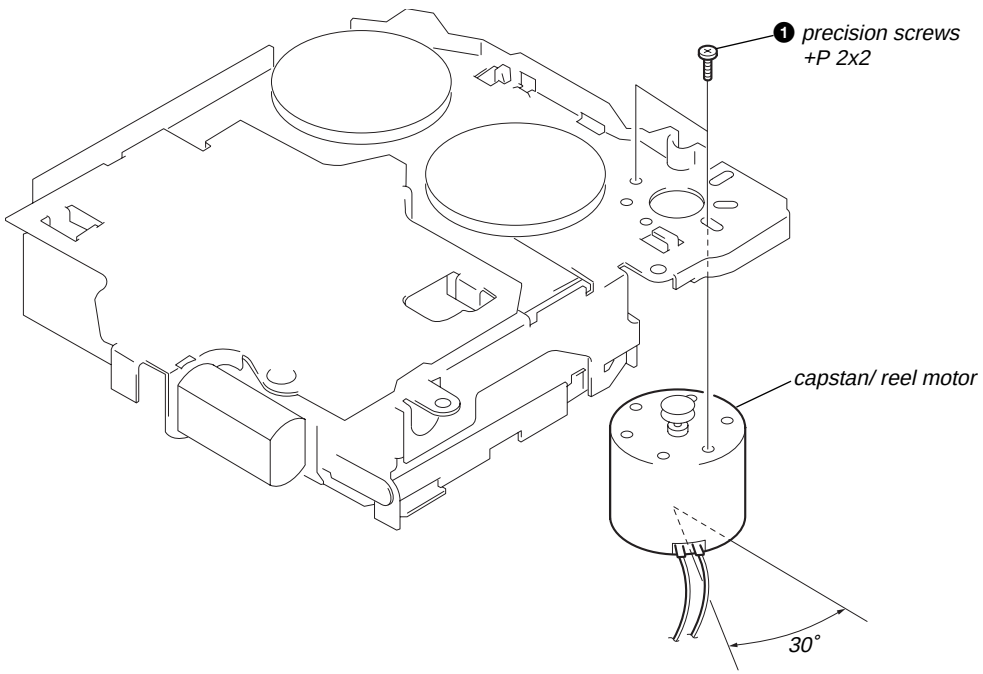
GEAR (LOADING FT)



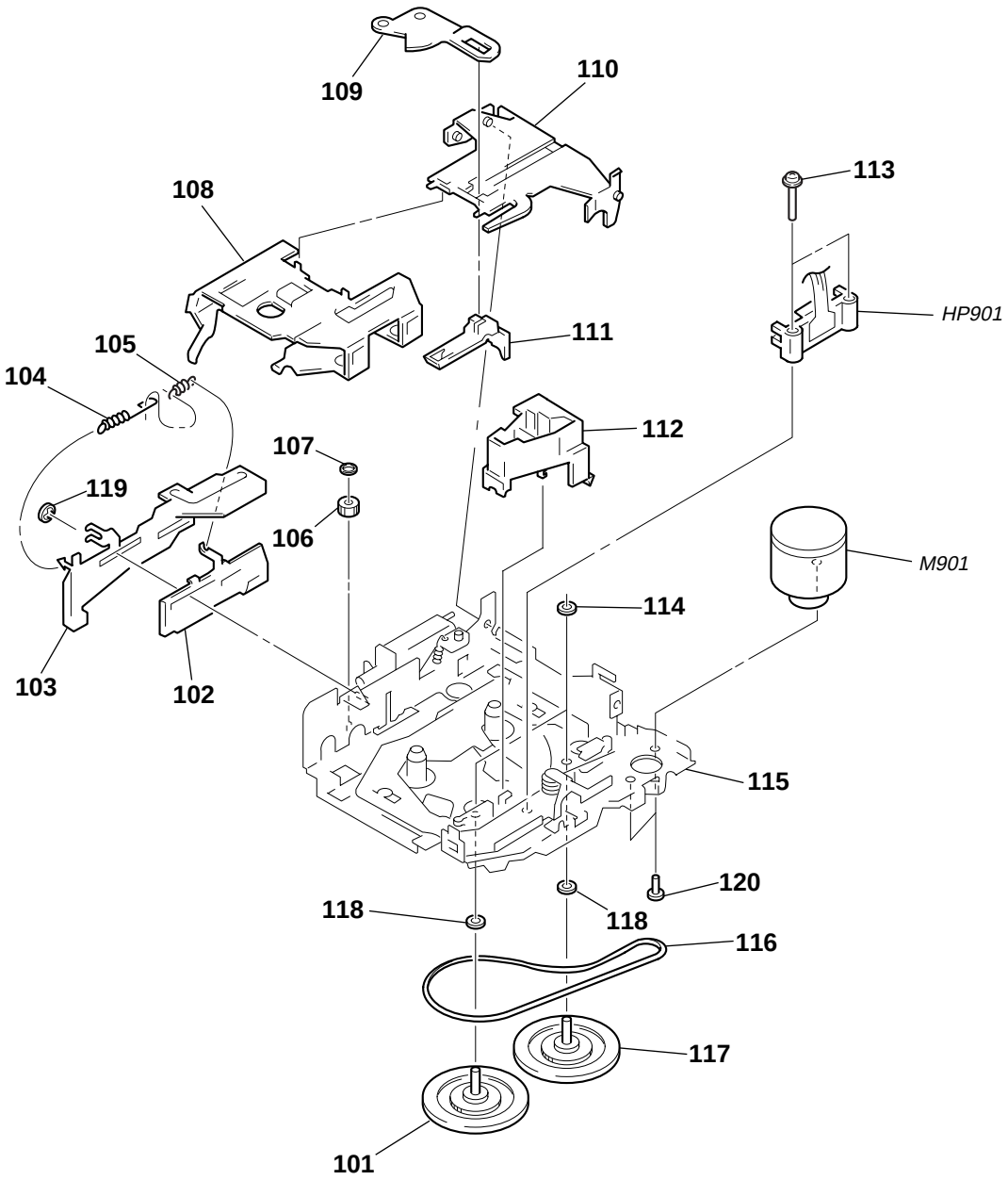
GUIDE (C)



MOUNTING POSITION OF CAPSTAN/REEL MOTOR (M901)



MECHANISM DECK SECTION
(MG-25E-136)



Ref. No.	Part No.	Description	Remark
101	A-3291-667-A	CLUTCH (FR) ASSY	
102	3-019-130-01	LEVER (LDG-A)	
103	3-019-131-01	LEVER (LDG-B)	
104	3-020-539-01	SPRING (LD-1), TENSION	
105	3-020-540-01	SPRING (LD-2), TENSION	
106	3-020-542-01	GEAR (LOADING FT)	
107	3-341-753-11	WASHER, POLYETHYLENE	
108	3-020-533-01	HOUSING	
109	3-020-532-01	ARM (SUCTION)	
110	3-020-534-01	HANGER	
111	3-933-346-01	CATCHER	

Ref. No.	Part No.	Description	Remark
112	3-933-344-01	GUIDE (C)	
113	3-014-798-01	SCREW (HEAD), SPECIAL	
114	3-364-151-01	WASHER	
115	X-3375-625-1	CHASSIS (SV) ASSY (D)	
116	3-017-302-01	BELT (25)	
117	3-936-853-01	FLYWHEEL (F)	
118	3-701-437-21	WASHER	
119	7-624-104-04	STOP RING 2.0, TYPE-E	
120	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE 3	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

Sony Corporation
Personal & Mobile Communication Company

9-925-651-81

99A04054-1
Printed in Japan ©1999. 1
Published by Quality Assurance Dept.